AMENDMENTS TO THE CLAIMS

 (Currently Amended) A process of growing a thin film of Al₂O₃ on a substrate having a surface in a reaction chamber by a sequential vapor deposition process comprising a plurality of cycles, each cycle comprising, in order:

exposing the substrate in the reaction chamber to gaseous trimethyl aluminum (TMA), such that more than one monolayer of TMA forms on the substrate surface; stopping provision of the gaseous TMA; removing gaseous TMA from the reaction chamber; exposing the substrate in the reaction chamber to atomic oxygen; and

removing atomic oxygen from the reaction chamber[[,]]; wherein in each cycle more than one monolayer of Al₂O₃ is formed.

- (Currently Amended) The process of [[c]]Claim 1, wherein in each cycle a layer
 of AbO₃ 3 Å thick is formed.
- (Previously Presented) The process of Claim 1, wherein the atomic oxygen is generated remotely in a radical generator.
- 4. (Original) The process of Claim 1, wherein the process is carried out at room temperature.
 - 5. 20. (Cancelled)